ABSTRACT

BACKGROUND

The liver plays a major role in metabolism of thyroid hormone by their conjugation, excretion, peripheral deiodination and in synthesis of thyroxine binding globulin. Although almost all patients of decompensated liver disease appear clinically euthyroid, abnormalities in circulating thyroid hormones have been shown in studies. Studies confirm that serum T3 concentrations parallel the severity of liver dysfunction.

STUDY

To do Thyroid function tests in patients with decompensated chronic liver disease and to determine the importance of serum Free T3 as a prognostic indicator.

METHOD

A prospective study was conducted with a sample of 60 patients admitted to the wards of Institute of Internal Medicine, RGGGH with a diagnosis of decompensated chronic liver disease. The duration of the study was six months. Child Pugh scores of the patients were calculated. Thyroid function tests were done in the patients and the results were analysed for statistical significance of serum free T3 levels as a prognostic indicator.

RESULTS

The Pearson correlation coefficient was applied for Child Pugh scores and serum free T3 levels which was found to be -0.964 with a P value of <0.01. The statistical analysis of the data showed that a significant association exists between the Child Pugh score and serum free T3 levels in patients with decompensated chronic liver disease.

CONCLUSION

The value of serum free T3 levels decreases proportionately as the Child Pugh score increases thus validating the role of measuring serum free T3 levels in patients with chronic liver disease and using it to assess prognosis with various levels of decompensation.

KEYWORDS

- Chronic liver disease
- Decompensation
- Child Pugh score
- Free T3
- Prognostic indicator